Abstract

A lead-free solder which is significantly less susceptible to copper leaching when used in a molten state in which coil ends of copper wire are dipped comprises 1.5 - 8 mass % of Cu, 0.01 - 2 mass % of Co, optionally 0.01 - 1 mass % of Ni, and a remainder of Sn and has a liquidus temperature of 420°C or below. The solder may further comprise at least one oxidation-inhibiting element selected from the group consisting of P, Ge, and Ga in a total amount of 0.001 - 0.5 mass %, and/or Ag in an amount of 0.05 - 2 mass % as a wettability-improving element.